SUPERVISORS

Ronald L. Jett, Chairman Heathsville, VA 22473 District V

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Thomas H. Tondin Wicomico Church, VA 22579 District IV



Roposals France

COUNTY ADMINISTRATOR

Kenneth D. Eades Heathsville, VA 22473 804-580-7666 (Voice) 804-580-7053 (Fax) keades@co.northumberland.va.us

COUNTY ATTORNEY

W. Leslie Kilduff, Jr. 804-435-0851 (Voice) 804-435-0551 (Fax)

Northumberland County, Virginia

Board of Supervisors
P. O. Box 129 • 72 Monument Place
Heathsville, Virginia 22473

December 19, 2013

Christine L. Lopilato
Director of Finance
Virginia Fire Programs Board
Department of Fire Programs
Burn Building Grant Administrator
1005 Technology Park Drive
Glen Allen, Virginia 23059-4500

Department of Fire Programs

Administration

Dear Ms. Lopilato:

On behalf of the Northern Neck Counties of Lancaster, Northumberland, Richmond and Westmoreland, I am pleased to submit this Burn Building Grant Application to the Virginia Fire Programs Board. This request for \$100,200 would complete renovations of the burn building at 2298 Brown Store Road, Heathsville, in Northumberland County.

The four Northern Neck counties own, maintain, and operate the burn building training facility. Please let us know what else you may need to consider our application. Thank you for your consideration.

Kenneth Eades

County Administrator

Cc: Frank Pleva, Lancaster County Administrator Morgan Quicke, Richmond County Administrator Norm Risavi, Westmoreland County Administrator Jerry W. Davis, Executive Director, NNPDC



Commonwealth of Virginia Department of Fire Programs

ATTACHMENT A
Burn Building Grant Application
Construction, Renovation, or Repair

A.	Applicant Information	
1.	Title of Jurisdiction Making Application (Check ☑ only one, then make entry)	County of Northumberland City of Incorporated Town of
2.	Employer Identification Number (EIN)	5 4 6 0 0 1 4 7 4
3.	Principal Point of Contact	(Include salutation, name & title.) Mr. Kenneth D. Eades, County Administrator
4.	Mailing Address (Include zip code+4) Identify COUNTY if appropriate →	P.O. Box 129 Heathsville VA 22473 Northumberland County
5.	Telephone Number	(804) 580-7666
6.	FAX Number	(804) 580-7053
7.	Internet e-mail address	keades@co.northumberland.va.us
8.	Application Scope (Check ☑ only one)	Sole Jurisdiction as identified in [A] ✓ Multiple Jurisdictions - Complete [F]
_		
В.	Facility Information (Burn Building)	The term "burn building" refers to an unoccupied structure. The purpose of the Burn Building is to provide live fire training to fire service personnel in support of Fire Fighter I and Fire Fighter II Training throughout the Commonwealth of Virginia.
1.	Current / Proposed Owner	(Party holding /to hold title to the property)
	of Facility	Northumberland County, Virginia
2.	In-Service Date or Age of Structure	(Leave blank if NOT an existing structire as reported in [C1] below.) Date October 2008 Unknown If unknown, enter approximate age in years 5.5 years
3.	Address of Structure	2298 Brown Store Road
l	(If appropriate, identify COUNTY	Heathsville VA 22473
	where located.)	Northumberland County, Virginia
4.	1403, including appropriate NFPA 140	
5.		ing be in compliance with the current edition of Sections I through IV of Grant Program as included in the VDFP Project Manual for Burn Building
6.	Comments (pertaining to Facility)	✓ None

C.	Facility Usage	
1.	Number of annual burns (must be documented)	VDFP FFI burns (in compliance with NFPA 1403 standards)
	(for New construction, this figure is projected)	VDFP FFII burns (in compliance with NFPA 1403 standards)
		Other Burns 10 (specifiy types of burns)
2.	Travel to another facility	Distance traveled to closest alternate facility (in miles) Time traveled to closest alternate facility (rounded to whole hours)
3.	Other localities served (list number of stations and number of firefighters served for each locality)	Name of Locality Number of stations Number of Firefighters Lancaster County 5 Number of 150
	(for New construction, this figure is projected) (if more than 5 localities are served,	Name of Locality Number of stations Number of Firefighters Number of Firefighters
	additional localities must be included on Additional Localities Served tab)	Name of Locality Number of stations Number of Firefighters Richmond County 3 Number of 133
		Name of Locality Number of stations Number of Firefighters Westmoreland County 6 120
		Name of Locality Number of stations Number of Firefighters
		TOTAL NUMBER OF STATIONS SERVED (from above and add') TOTAL NUMBER OF FIREFIGHTERS SERVED (from above and add') 495
4.	Maintenance of facility (for New construction, skip Section C.4. Section E.2. MUST be completed)	Annual Maintenance Inspections Ves No (documentation of annual inspections MUST be provided with application for inspections conducted after 12/2007)
		Previous Repair Projects Yes No (documentation MUST be provided with application for most recent repairs)

D.	Project Description	
1.	Level of work proposed (Check ☑ only one)	NEW Construction where no such structure previously existed RENOVATION of an existing burn building or substantially similar structure REPAIR of an existing burn building (up to \$10,000)
2.	Type of Building (proposed or existing)	✓ Class A fuel Prototype I plans (brick, block, concrete) Class B fuel Prototype II plans (steel frame) Other*
		3,200 Square Footage of Building (proposed or existing)
		Number of Burn Rooms on 1st floor Number of Burn Rooms on 2nd floor
		For New Construction: *If building plans deviate from Prototype I or II, applicant MUST define building concept and include proposed plans with application.
		For Renovations or Repairs: *If building plans deviate from Prototype I or II, applicant MUST include copy of existing building plans with proposed renovations/repairs.
3.	Architectural and/or Engineering (A/E) (Check ☑ only one for each)	Has an A/E study already been completed? ✓ Yes No Not Applicable If so, is a copy attached to this application? ✓ Yes No Not Applicable
4.	Condemnation and/or fitness for use	Is this structure still in use for certification of FFI and FFII at the time of application? Yes No If yes, is there currently a scheduled date to remove the
	(Leave [C4] blank if this application is	structure from service? Yes ✓ No
	for totally new construction; otherwise	If yes, enter the month & year:
	Check ☑ only one for each statement.)	If not presently in service, has this structure been <u>condemned</u> by a building official or other such entity legally empowered to do so? Yes No Not Applicable Yes No Not Applicable

E. Financial Plan		et must be attached to this application.
1. Project Budget (Capital Expend)	For renovation/repair projects	, contractor estimates must be attached
a. Expense		
i. Estimated Cost of Construction (Enter or check ☑)	\$ 100,200.00	Unknown at time of application
ii. Estimated A/E Costs (Enter or check ☑)	\$ 13,800.00	Unknown at time of application
III. Estimated Total Costs (Enter or check ☑)	\$ 114,000.00	Unknown at time of application
b. Revenue		
i. Grant Funding Being Requested New construction maximum \$430,000	\$ 100,200.00	
ii. Matching / Cost Share Funds	\$ 13,800.00	
iii. Source of Matching Funds (local contributions, donations, etc.)	Contributions by the countie	s the same and
2. Operating Budget (Maint, Expend)		
a. Is there a financial agreement among partnering localities?	✓ Yes	No Not Applicable
b. Is there a local budget for annual maintenance costs?	✓ Yes	No
c. Is there a local budget for annual inspection costs?	✓ Yes	No
d. Is there a local budget for 5-year inspection costs?	√ Yes	No

F.	Additional Parties of Interest	Identify hereunder ALL jurisdictions (Not their Departments) otherwise participating in the proposed project. Attach additional								
	(Mark N/A and skip section [D] if									
	not applicable - see [A.8])	sheets as may be required.								
1.	NON-Applicability	No parties other than the jurisdiction identified in [A] above.								
2.	Formal Agreement Among Parties	Is there a formal agreement among parties with regard to the proposed project? Yes No If yes, is a copy attached to this application? Yes No Is there a formal agreement among parties with regard to the shared use of the facility? If yes, is a copy attached to this application? Yes No								
	{ Reproduce and complete as many	additional blocs as may be necessary for complete disclosure.								
2a.	Complete one each for ALL other Parties of Interest	Number 2 of a total of 4 parties to proposed project (Count the LEAD Locality as #1, thereby start with #2.)								
2b.	Title of Jurisdiction	✓ County of Lancaster								
	(Check ☑ only one, then make entry)	City of Incorporated Town of								
2c.	Employer Identification Number (EIN)	5 4 6 0 0 1 3 8 2								
2d.	Principal Point of Contact	(Include salutation, name & title.) Frank Pleva, County Administrator								
2e.	Mailing Address Identify COUNTY if appropriate →	(Include zip code+4) 8311 Mary Ball Road Lancaster VA 22503 Lancaster County								
2f.	Telephone Number	(804) 462-5129								
2g.	FAX Number	(804) 462-0031								
2h.	Internet e-mail address	fpleva@lancova.com								

2a.	Complete one each for ALL	Number 3 of a total of 4 parties to proposed pro											
	other Parties of Interest	(Count the LEAD Locality as #1, thereby start with #2.)											
2b.	Title of Jurisdiction (Check ☑ only one, then make entry)	-	Cour	•	d Tow	n of	Ric	hmor	id Cou	inty			
	Alter Action (Pennis		Tiricoi	porate	u TOW	II OI	_		_	_			1
2c.	Employer Identification Number (EIN)	5	4	Territoria (6	0	0] 1	5		6	7	
2d.	Principal Point of Contact			itation, cke, Co				or					0 1
2e.	Mailing Address Identify COUNTY if appropriate →	P.O. I Wars	Box 10	22572		Ĭ)						ine	gravEl.
2f.	Telephone Number	14	(804	4)		333-	3415						
2g.	FAX Number		(804	4)		333-	3408						
2h.	Internet e-mail address	mquio	cke@c	o.richm	ond.v	a.us	Self (C				Ment .		

	(Reproduce and complete as m	any additio	nal blocs	s as may	be no	ece	ssary	for cor	mpl	ete di	sclosu	e.)			i same
2a.	Complete one each for ALL other Parties of Interest	Numb	(Cour	t the L			total ocalit	y as		ther	eby s	tar	t with		d proje
2b.	Title of Jurisdiction (Check ☑ only one, then make entry)	/	Coun City of Incor	1.0	d Tov	wn	of	We	str	nore	land (Cou	inty	10 mg	
2c.	Employer Identification Number (EIN)	5	4	water.	6	Ι	0	0		1	6		7	8	
2d.	Principal Point of Contact			itation, , Coun											
2e.	Mailing Address Identify COUNTY if appropriate →	P.O. I Montr	3ox 10 oss VA	code+4 00 \ 22520 nd Cou	0										
2f.	Telephone Number		(804	1)			493-	0130							
2g.	FAX Number		(804				493-								
2h.	Internet e-mail address	nrisavi@westmoreland-county.org													

G.	Electronic Transfer of Funds Information	Note The completion of this section is optional at the time of application and will not hinder determination of eligibility, etc. However, if							
		not provided and since funds will only be transferred electronically,							
79		disbursement will be delayed until this information is properly provided,							
1.	Account Ownership Information								
	Employer Identification Number	5 4 - 6 0 0 1 4 7 4 SSN may NOT be substituted.							
	Complete next three (3) enti	ries ONLY if Name is different than ACCOUNT TITLE as it appears in [E2]. (Last, First, Initials)							
	NAME								
	NAME	(Telephone Number)							
	MAIN								
		(Telephone Number)							
	ALTERNATE	(804) 580-7508							
_	Direct Demosit Assessmt Information								
۷.	Direct Deposit Account Information (Check ☑ one Type of Account)	✓ Checking Savings							
	, , ,	Savings							
	DOLITING TRANSIT NUMBER	(9 digits)							
	ROUTING TRANSIT NUMBER	051403711							
	ACCOUNT NUMBER	111128706							
	ACCOUNT TITLE	Northumberland County							
	FINANCIAL INSTITUTION	Eastern Virginia Bankshares, Inc.							



Note This section of the application MUST be properly executed for the application to be complete. Certification may be completed by:

- City Manager /or/ Deputy
- County Administrator /or/ Deputy
- Town Manager /or/ Mayor
- Or other duly authorized official but only when the application is accompanied by a copy of an 'Ordinance' or other formal instrument clearly granting that party such authority.

Only completed applications can be acted upon,

CERTIFICAT	<u>ION</u>			
described [A]	n is made on bel with the full know herein made a	wledge and beli	ef that all	_
Kenneth D. Eades	i santi di bi	County A	Administrator Title	<u> </u>
State of Virginia City / County of North On this 19 Th day of Dec Public for the Commonwer	MER (month) in 20			
known (or to me proved) the above, and acknowledg	to be the identical person	n named herein and hav	ving in my presence	executed
My Commission expires:	11/30/2016 Date	Notary Public	* common	VOLIO VOLIO

ENGINEERING DESIGN ASSOCIATES

P. O. Box 50067 Richmond, Virginia 23250 (804) 236-0190 FAX (804) 236-0194 P. O. Box 515 Wicomico Church, Virginia 22579 (804) 580-2227 FAX (804) 580-3334

December 16, 2013

Mr. Jerry W Davis, AICP Northern Neck Planning District Commission P.O. Box 1600 Warsaw, Virginia 22572

RE: Repairs To Northumberland County Burn Building Wicomico Church, Virginia EDA # 13244

Dear Mr. Davis:

We are pleased to present to you the complete plans and specifications for the repairs to the above referenced building. We have included three sets of each for your use. If you require more, just let us know and we will send them to you. The specifications include some bid documents for you to study. Of course, they are blank at this time. Please look them over at your convenience and let us know of any changes you would like to make once these documents are ready for bidding.

We have also included a narrative based on, and in response to, the original engineer's assessment of the necessary repairs including our proposed actions.

Included, too, is our engineer's estimate of the final construction costs to complete this project.

If you have any questions, or if we may be of further service, please give us a call.

Very truly yours

Thomas M White

Engineering Design Associates

ENGINEERING DESIGN ASSOCIATES

P. O. Box 50067 Richmond, Virginia 23250 (804) 236-0190 FAX (804) 236-0194 P. O. Box 515 Wicomico Church, Virginia 22579 (804) 580-2227 FAX (804) 580-3334

Northumberland County Burn Building

NARRATIVE

This narrative addresses each of the twelve items in the Summary of Deficiencies noted in the engineer's report dated August 7, 2013 and addressed to you.

ITEM 1 – Cracked and broken CMU and deteriorated mortar joints in the interior and exterior CMU Walls and lintels of the first and second floors.

Discussion: We found two loose blocks and numerous cracks in the mortar joints. The loose blocks are a hazard. The cracking in the mortar joints in the exterior walls is very similar to cracking we find in most masonry walls of this age. The cracking on the interior walls is more akin to "crazing" which has occurred due to the frequent fires to which these walls are exposed. We feel that such crazing should be expected on the interior walls and it is precisely for this reason that these walls are considered sacrificial. It would be an exercise in futility to try and chase each of these cracks only to have the same ones, and more, become evident after the first training session after repairs have been made.

Action: Remove, clean, and re-install the loose blocks. Chase and re-point the cracks in the mortar joints of the exterior walls. Seal the exterior walls with a water-seal product to protect against water infiltration from the weather. We also recommend sealing the expansion joints in the exterior walls to both make the building more weather tight and to help prevent smoke from escaping during training exercises.

ITEM 2 – Concrete apron is cracked in several locations.

Discussion: We agree that the apron is cracked.

Action: We do not recommend any action regarding this condition. A repair would consist of saw-cutting a portion of the slab at each location, removing that portion of the concrete, and replacing it with like concrete. After such a repair was made the slab would crack at the sawed joints again thereby, in effect, trading a crooked joint for a straight one. Also, any trucks are to be kept a minimum of fifteen feet from the building which keeps them off the slab. We did not note any trip hazard regarding said cracking.

ITEM3 – Cracks and spalls in roof, floor, and ceiling surfaces of the concrete roof and floor slabs and concrete beams

Discussion: We, too, noted numerous cracks in the roof and mezzanine floor slabs. However, we did not note any cracking in the concrete beams which caused concern. We found that the cracks in the two elevated slabs (roof and mezzanine) are the result of remedial work that occurred after the slabs were originally installed. We question the methods used to make these remedial repairs and feel that they are of questionable value. However, these slabs have apparently been functional and we see no reason to cause further intrusion into these structures.

Action: Chase and repair the slab cracks in the top surface with a gravity feed epoxy. After all cracks have been repaired, seal and coat the slabs with an epoxy coating to protect them from penetration by water. Such water infiltration would eventually corrode the reinforcing steel, and cause surface spalling through the freeze/thaw cycles of nature. A non-slip surface is to be applied to help insure the safety of those using the facility.

ITEM 4 – Efflorescence on the interior faces of the CMU load bearing walls indicating moisture passing through the walls.

Discussion: We noted the same.

Action: Clean the exterior walls and apply a water seal to help prevent water infusion from the elements. It must be noted, however, that the walls are being subjected to water from the interior during each training exercise.

ITEM 5 – Timber framing remaining in chop-out opening prop in sloped concrete roof slab.

Discussion: The wood framing is in place, but it seems to us that that is the intent so that training may be administered for such a condition. We feel it is desirable that the area be made somewhat water tight to prevent encroachment by the elements.

Action: Install a removable cover over the opening. This protects the opening from the weather and helps to keep the wood from rotting.

ITEM 6 – TMS ceiling sensor for the second floor burn room is not located in burn room 201, but at rear end of hallway 203 instead.

Discussion: We found the same.

Action: Install a new sensor in the location indicated. Remove the blank cover and wire to control board.

ITEM 7 – Missing fire clay plugs over the anchor bolts of the thermal lining tiles on ceilings and surrounding beams and columns in burn rooms.

Discussion: We did not find this condition, but learned that the clay plugs had been repaired by the VFD.

Action: None required.

ITEM 8 – Missing or incorrect signage.

Discussion: Correct

Action: Provide new signs on each exterior wall.

ITEM 9 – Absence of slip angle or guardrail at perimeter of sloped concrete roof slab.

Discussion: We agree. However, we also feel that any guard must meet OSHA standards.

Action: Install a galvanized steel guard rail around the perimeter of the roof slab with a gate on the lower side for access by fire personnel.

ITEM 10 - Loose handrail attachment at bottom of interior stairwell at left elevation wall.

Discussion: Agreed.

Action: Repair anchorage of bracket or replace anchor.

ITEM 11 – Trip hazard at transition from second floor/lower concrete roof slab to exterior metal stairwell finish grade.

Discussion: We agree. There is a one inch difference in elevation between the edge of the slab and the stair landing.

Action: Form and place an epoxy based cementious topping at the area in question and make level with the landing.

ITEM 12 – Combustible furnishing props and appliances stored within the burn building prop.

Discussion: Some items were observed.

Action: Remove all unnecessary items and store elsewhere.

REPAIRS TO NORTHUMBERLAND BURN BUILDING

BUDGET ESTIMATE

General Conditions	\$25,000
Re-install Loose Blocks	\$500
Repair Cracked Mortar Joints	\$3,500
Repair/Seal Cracks In Mezzanine/Roof Slabs	\$22,700
Coat and Seal Mezzanine/Roof Slabs	\$12,800
Seal Exterior Expansion Joints	\$3,200
Handrail On Roof	\$13,900
Skylight Cover	\$2,600
Seal Exterior Masonry Walls	\$14,700
Re-attach Loose Handrail Bracket	\$300
Install Heat Sensor	\$1,000
Total Estimated Cost	\$100,200

ENGINEERING DESIGN ASSOCIATES

P. O. Box 50067 Richmond, Virginia 23250 (804) 236-0190 FAX (804) 236-0194 P. O. Box 515 Wlcomico Church, Virginia 22579 (804) 580-2227 FAX (804) 680-3334

January 7, 2014

Northern Neck Planning District Commission

Northumberland Burn Building Breakdown of General Conditions Costs

Project supervision, field\$12	2,000
Project management, office\$8	,000
Travel expenses\$	800
Jobsite security\$ 2	,800
Quality control, testing\$	600
Temporary facilities, office\$	400
Temporary facilities, sanitary\$	300
Construction waste management, disposal \$	100
TOTAL\$2:	5,000